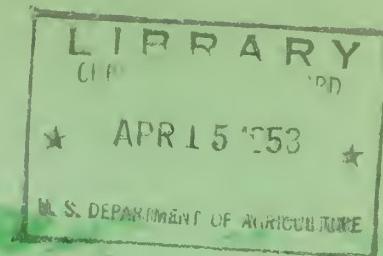


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FEDERAL - STATE - PRIVATE COOPERATIVE  
SNOW SURVEY and WATER SUPPLY FORECASTS  
for  
ARIZONA

UNITED STATES DEPARTMENT of AGRICULTURE  
SOIL CONSERVATION SERVICE

Data included in this report were obtained by the agency named above  
in cooperation with the Federal, State and private organizations listed  
on the last page of this report.

AS OF  
APR. 1, 1958

# UNITED STATES DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

## TO RECIPIENTS OF COOPERATIVE SNOW SURVEY AND WATER SUPPLY FORECAST REPORTS:

The climate of the cultivated and populated areas of the West is characterized by relatively dry summer months. Such precipitation as occurs falls mostly in the winter and early spring months when it is of little immediate benefit to growing crops. Fortunately, most of this precipitation falls as mountain snow which stays on the ground for months, melting later to sustain streamflow during the period of greatest demand during late spring and summer. Thus, nature provides in mountain snow an imposing water storage facility.

The amount of water stored in mountain snow varies from place to place as well as from year to year and accordingly, so does the runoff of the streams. The best seasonal management of variable western water supplies results from fore-knowledge of the runoff.

A snow survey consists of a series of about ten samples taken with specially designed snow sampling equipment along a permanently marked line, about 1000 feet in length, called a snow course. The use of snow sampling equipment provides snow depth and water equivalent values for each sampling point. The average of these values is reported as the snow survey measurement for a snow course.

Snow surveys are made monthly or semi-monthly beginning in January or February and continue through the snow season until April, May or June. Currently more than 1300 western snow courses are measured each year. These measurements furnish the key data for water supply forecasts.

By relating snow survey measurements taken over a period of years to spring-summer runoff during the same period, relationships have been developed which make it possible to forecast seasonal runoff several months in advance of occurrence. In order to make a forecast, once a forecast relationship has been developed, the maximum snow water content at previously selected key snow courses is usually entered in the forecast relationship. More accurate forecasts are often obtained when other factors such as soil moisture, base flow and spring precipitation are considered and included in the forecast relationships.

Listed below are the Federal-State-Private Cooperative Snow Survey and Water Supply Forecast reports available for the West which contain detailed information on snow survey measurements, streamflow forecasts, reservoir storage, soil moisture and other guide data to water management and conservation decisions.

## PUBLISHED BY SOIL CONSERVATION SERVICE

REPORTS RIVER BASINS	ISSUED	COOPERATING WITH	LOCATION
COLORADO, RIO GRANDE .....	MONTHLY (FEB.-MAY),.....	COLO. EXP. STATION .....	FT. COLLINS, COLO.
ANDO PLATTE-ARKANSAS			
COLUMBIA <i>Includes Alaska</i> .....	MONTHLY (JAN.-MAY).....		BOISE, IDAHO
UPPER MISSOURI .....	MONTHLY (FEB.-MAY).....	MONT.AGR.EXP.STATION .....	BOZEMAN, MONTANA
WEST-WIDE .....	SEMI-ANNUALLY (OCT. 1 AND APR. 1)	COOPERATORS .....	PORTLAND, OREGON

## STATES

ARIZONA .....	SEMI-MONTHLY .....	SALT R. VALLEY WATER. USERS ASSOCIATION	PHOENIX, ARIZONA
(JAN. 15-APR. 1)			
NEVADA .....	MONTHLY (FEB.-APR.) .....	NEVAOA STATE ENGINEER .....	RENO, NEVAOA
OREGON .....	MONTHLY (JAN.-MAY) .....	ORE.AGR.EXP.STATION .....	PORLAND, OREGON
UTAH .....	MONTHLY (JAN.-MAY) .....	UTAH STATE ENGINEER UTAH AGR.EXP.STATION .....	SALT LAKE CITY, UTAH
WASHINGTON .....	MONTHLY (FEB.-MAY) .....	WASH. STATE DEPT. OF CONSERVATION AND DEVELOPMENT	SPOKANE, WASHINGTON
WYOMING .....	MONTHLY (FEB.-JUNE) .....	WYOMING STATE ENGINEER .....	CASPER, WYOMING

Copies of the various reports may be secured from: Head, Water Supply Forecasting Section  
Soil Conservation Service  
209 S.W. 5th Avenue, Portland 4, Oregon

## PUBLISHED BY OTHER AGENCIES

### OTHER SNOW SURVEY REPORTS

BRITISH COLUMBIA .....	MONTHLY (FEB.-JUNE) .....	COMPTROLLER, WATER RIGHTS BR., DEPT. OF LANOS AND FORESTS. PARLIAMENT BLOGS. VICTORIA, B.C.
CALIFORNIA .....	MONTHLY (FEB.-MAY) .....	CALIFORNIA DEPARTMENT OF WATER RESOURCES, SACRAMENTO, CALIFORNIA

FEDERAL-STATE COOPERATIVE SNOW SURVEYS AND WATER SUPPLY FORECASTS

for

A R I Z O N A

(Salt, Verde, Gila and part of Lower Colorado River Basin)

Issued

April 3, 1958

Report Prepared

by

George Watt, Snow Survey Supervisor  
Soil Conservation Service  
807 West Washington  
Phoenix, Arizona

Issued by

Robert V. Boyle  
State Conservationist  
Soil Conservation Service

Victor I. Corbell  
President  
Salt River Valley Water Users' Ass'n.

1000FT AT 500 FT DEPTH FROM THE SURFACE

1000FT AT 500 FT DEPTH

1000FT AT 500 FT DEPTH FROM THE SURFACE

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## LEGEND

- DRAINAGE BASIN BOUNDARY
- SNOW COURSE

## ARIZONA COOPERATIVE SNOW SURVEYS

SNOW COURSES AND DRAINAGE BASINS  
JANUARY 1956

0 40 80 120 160 200  
SCALE IN MILES

INDEX TO SNOW COURSES

NUMBER*	NAME	SEC	TWP	RGE**	ELEVATION	RIVER BASIN
11-P-3	Antelope Park	29	19N	8E	7300	Verde # ..... Discontinued
9-S-1	Baldy (p)	28	7N	27E	9000	Salt-Little Colorado
10-T-1	Bear Wallow	6	12S	16E	8100	Gila
9-S-6	Beaver Head	13	4N	30E	8000	Salt-Frisco
9-S-3	Big Lake Knoll	2	5N	28E	8800	Salt-Frisco-Little Colorado .. Discontinued
7-S-3	Black Canyon	8	13S	11W***	6790	Gila
12-N-1	Bright Angel	34	33N	3E	8400	Lower Colorado
12-R-1	Camp Wood	3	16N	6W	5700	Williams-Verde
10-R-3	Canyon Creek (s)	18	11N	15E	7500	Salt
11-R-2	Casner Park (s)	19	18N	8E	6950	Verde
12-P-1	Chalender (s)	27	22N	3E	7100	Verde
8-S-3	Corner Mountain	7	10S	17W***	8850	Gila-Frisco
9-S-9	Corn Creek (p) Lat. $33^{\circ}45'N.$ Long. $109^{\circ}45'W.$ §				7730	Salt
9-S-7	Coronado Trail	26	5N	30E	8000	Salt-Frisco
10-R-2	Elk	31	11N	14E	7600	Salt-Little Colorado ..... Discontinued
10-R-6	Forest Dale (s)	2	9N	21E	6000	Salt-Little Colorado
11-P-2	Fort Valley	22	22N	6E	7350	Verde #
9-R-5	Ft. Apache	18	7N	27E	9160	Salt-Little Colorado
8-S-1	Frisco Divide	31	6S	20W***	8000	Frisco-Gila
12-R-4	Gaddes Canyon	11	15N	2E	7600	Verde #
10-R-5	Gentry	36	11N	15E	7600	Salt-Little Colorado
11-P-1	Grand Canyon	21	30N	4E	7500	Lower Colorado
11-R-5	Happy Jack	30	17N	9E	7630	Verde
10-R-4	Heber (p)	28	11N	15E	7600	Salt-Little Colorado
7-S-2	Inman	6	11S	10W***	7800	Gila
12-R-2	Iron Springs	22	14N	3W	6200	Williams-Verde
9-S-2	Maverick Fork (s)(p)	13	6N	27E	9050	Salt-Little Colorado
9-R-4	McKay Peak	13	7N	24E	8250	Salt ..... Not read
9-R-2	McNary (s)	14	8N	23E	7200	Salt-Little Colorado
9-R-1	Milk Ranch	28	8N	23E	7000	Salt
12-R-3	Mingus Mountain	3	15N	2E	7100	Verde #
8-S-2	Mogollon	2	11S	19W***	7000	Frisco-Gila
11-R-4	Mormon Lake	13	18N	8E	7350	Verde #
11-R-3	Mormon Mountain(s)	14	18N	8E	7500	Verde
11-R-1	Munds Park (s)	7	18N	7E	6500	Verde
8-S-4	N-Bar Lake	16	10S	17W***	8600	Gila
8-S-5	Negrito	6	10S	16W***	8200	Gila
9-S-4	Nutrioso	23	6N	30E	8500	Salt-Frisco-Little Colorado
9-S-5	Pacheta	§ At town of Maverick, Ariz.				Salt
9-N-1	Roof Butte	15	8N	6W****	8500	Little Colorado # ..... Not read.
10-T-2	Rose Canyon	15	12S	16E	7300	Gila
9-S-8	State Line	6	6S	21W***	8000	Gila-Frisco
7-S-1	Taylor Creek	20	10S	10W***	7850	Gila
9-R-3	Trout Creek	5	7N	24E	6400	Salt ..... Not read
8-N-1	Washington Pass	Lat. $36^{\circ}05'N.$ Long. $108^{\circ}50'W.$ §				Little Colorado # ..... Not read
13-P-1	Willow Ranch	16	21N	11W	5000	Williams
10-R-1	Woods Canyon	15	11N	13E	7640	Salt-Little Colorado ..... Discontinued
10-S-1	Workman Creek	33	6N	14E	6900	Salt

\* Number indicates location of course within coordinate rectangle, thus 9-N 1 is Course #1 in coordinate rectangle 9-N .

\*\* All in Gila and Salt River Base and Meridian except where otherwise indicated.

\*\*\* New Mexico Principal Meridian.

\*\*\*\* Navajo Base.

# On adjacent drainage.

(s) Soil Moisture Station installed on or in vicinity of course.

§ Unsurveyed.

(p) Storage gage installed on or in vicinity of course

ARIZONA WATER SUPPLY OUTLOOK

April 1, 1958

\*  
\* Above normal precipitation has further \*  
\* improved the water supply outlook for \*  
\* Arizona. Reservoir storage is 93 per \*  
\* cent of average and runoff is forecast \*  
\* for 160 per cent of average for the \*  
\* April through May period. This is the \*  
\* best year since 1952. \*  
\* \*

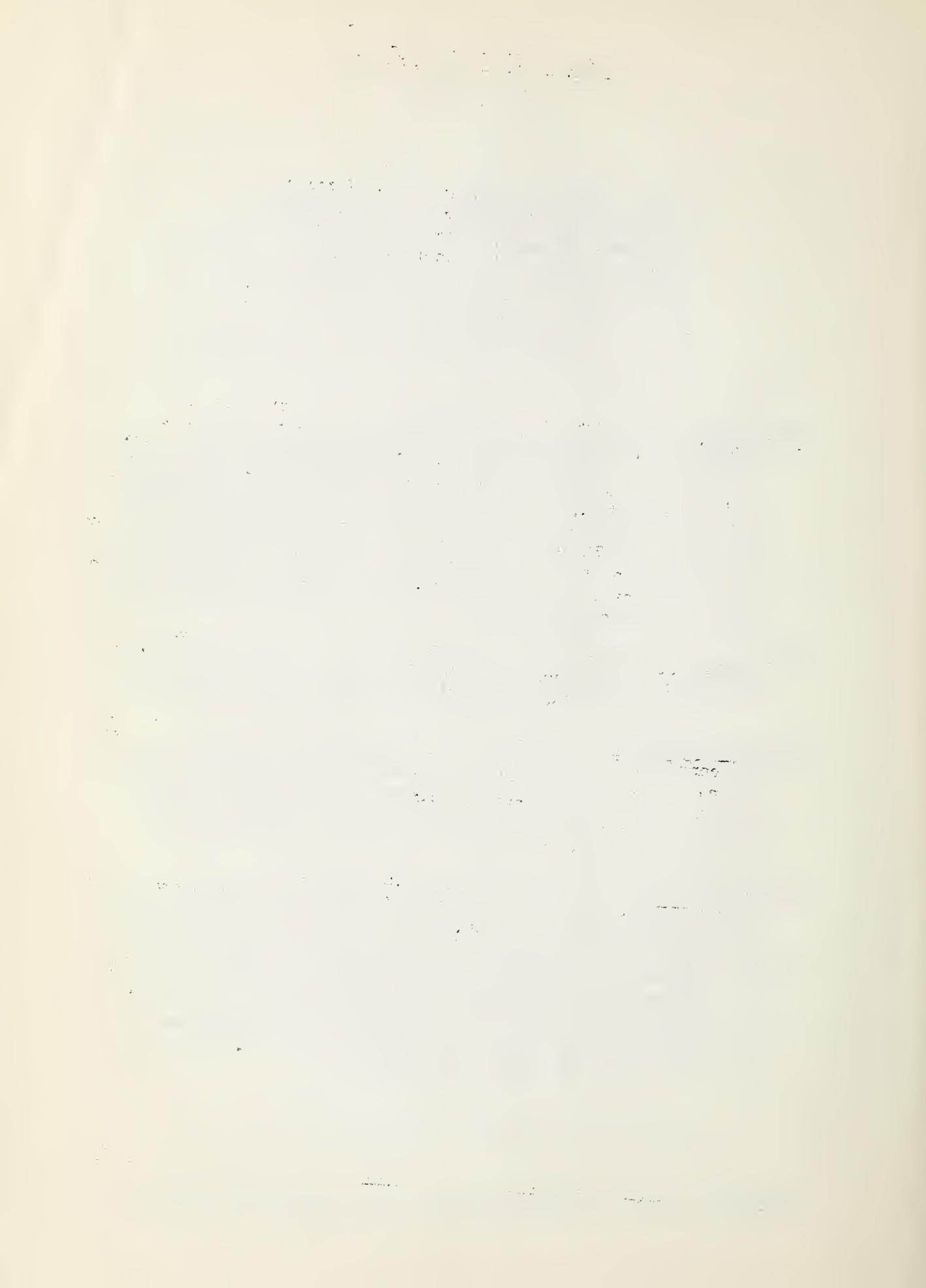
SNOW COVER: Snow cover continues to increase in the higher elevations. The snow at lower elevations has melted but has added water to the reservoirs. In the White Mountains above 9,000 feet the snow was 300 per cent of average, being 3 feet deep and containing 12 inches of water. The snow pack on the Salt River Watershed is 260 per cent of average and that on the Verde is 73 per cent. However, above average precipitation has fallen on the Verde River Watershed, mostly as rain, and is now water in the reservoirs. The snow on the Gila Watershed is 380 per cent of average.

SOIL MOISTURE: Soil moisture conditions in the forest mountains are excellent. All soil moisture stations showed the soil to be filled to the four-foot depth measured by the meters.

RESERVOIRED WATER: The stored water in eight major reservoirs in central Arizona is 93 per cent of average and 31 per cent of capacity. The Carl Pleasant Reservoir is the lowest of the reservoirs in this group, being 72 per cent of average, and does not have much potential for improving unless we have more heavy storms.

STREAM FLOW: The stream flow in Arizona during March has been about 200 per cent of average due to the greatly above-normal precipitation during the month. The forecast for the April through May period is for a runoff of 160 per cent of average. The Gila and Salt River Watersheds have considerable snow cover and with normal rainfall should yield good flows. The runoff on the Verde and Tonto Rivers will depend more heavily on precipitation during April. Their watersheds are primed and they will react very quickly to rainfall.

THIS IS THE FINAL SNOW SURVEY AND WATER SUPPLY FORECAST BULLETIN FOR THIS YEAR.



STREAM FLOW FORECASTS - APRIL 1, 1958

The following summarized runoff forecasts are based principally on mountain snow cover and on the assumption that precipitation and temperature will be near average from the present time to the end of the forecast period. Appreciable deviations from normal of temperature and/or precipitation will correspondingly modify these forecasts.

BASIN, STREAM AND STATION	SEASONAL STREAM FLOW IN THOUSANDS OF ACRE FEET					
	FORECAST PERIOD			APRIL - MAY, INCLUSIVE		
	Forecast Runoff 1958	Percent 15-Year Average	Measured Runoff			1938-52 Average
Salt River at Intake	300.0	173	67.1	60.9	22.1	173.9
Tonto River above Roosevelt	10.0	72	3.9	2.0	1.2	13.9 1/
Verde River above Horseshoe	75.0	97	22.7	18.4	19.0	77.7
Gila River at Virden	50.0	224	4.7	2.5	3.2	22.3
Frisco River at Clifton	55.0	233	7.9	3.9	3.9	23.6
Little Colorado River above Lyman Dam 2/	10.0	133	---	1.6	0.2	7.5 1/

1/ Average is for less than 15 years of record in the 1938-52 period.

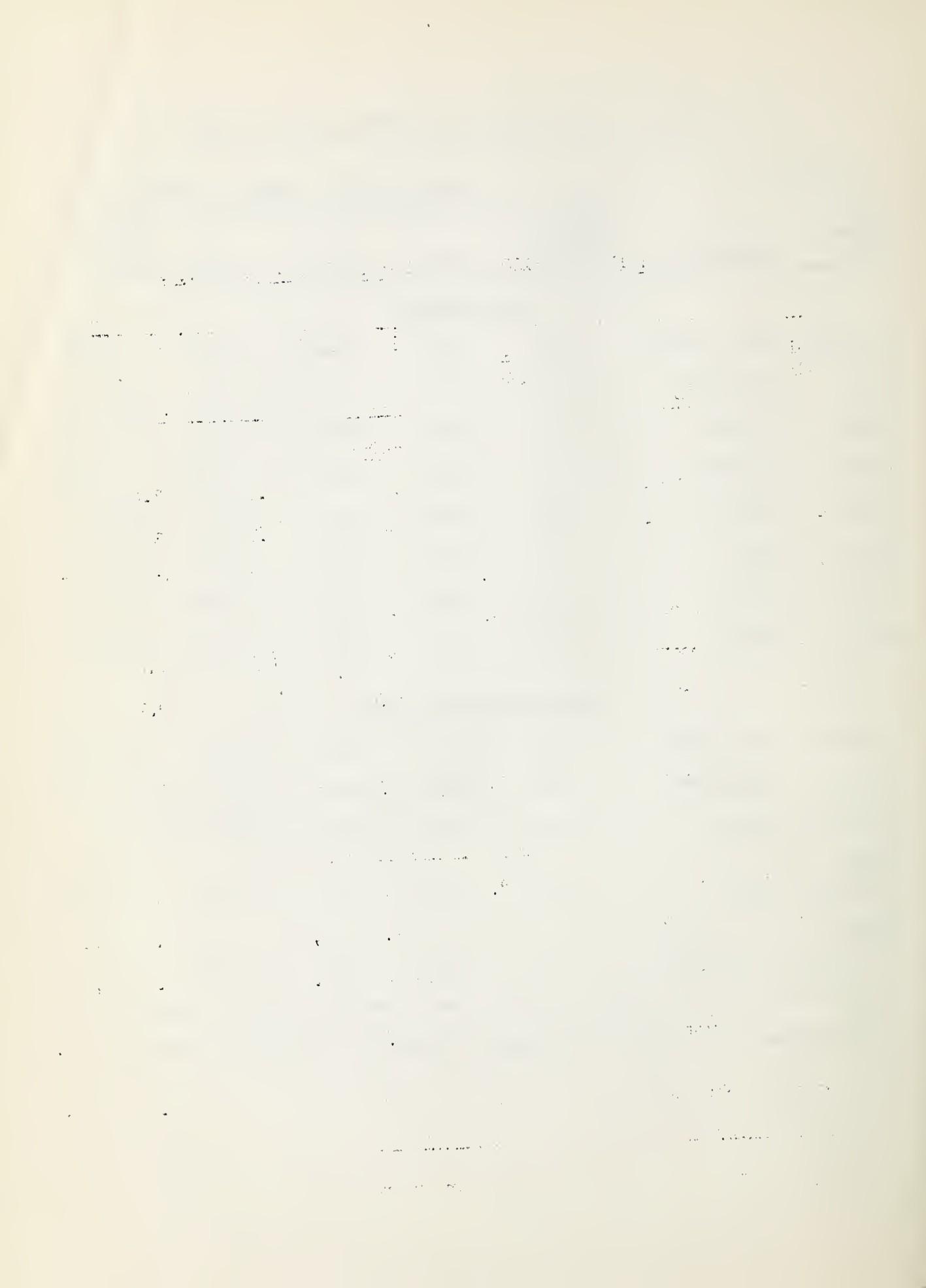
2/ Forecast period for Little Colorado River above Lyman Dam is for April - June, inclusive.

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STATUS OF ARIZONA RESERVOIR STORAGE - APRIL 1, 1958

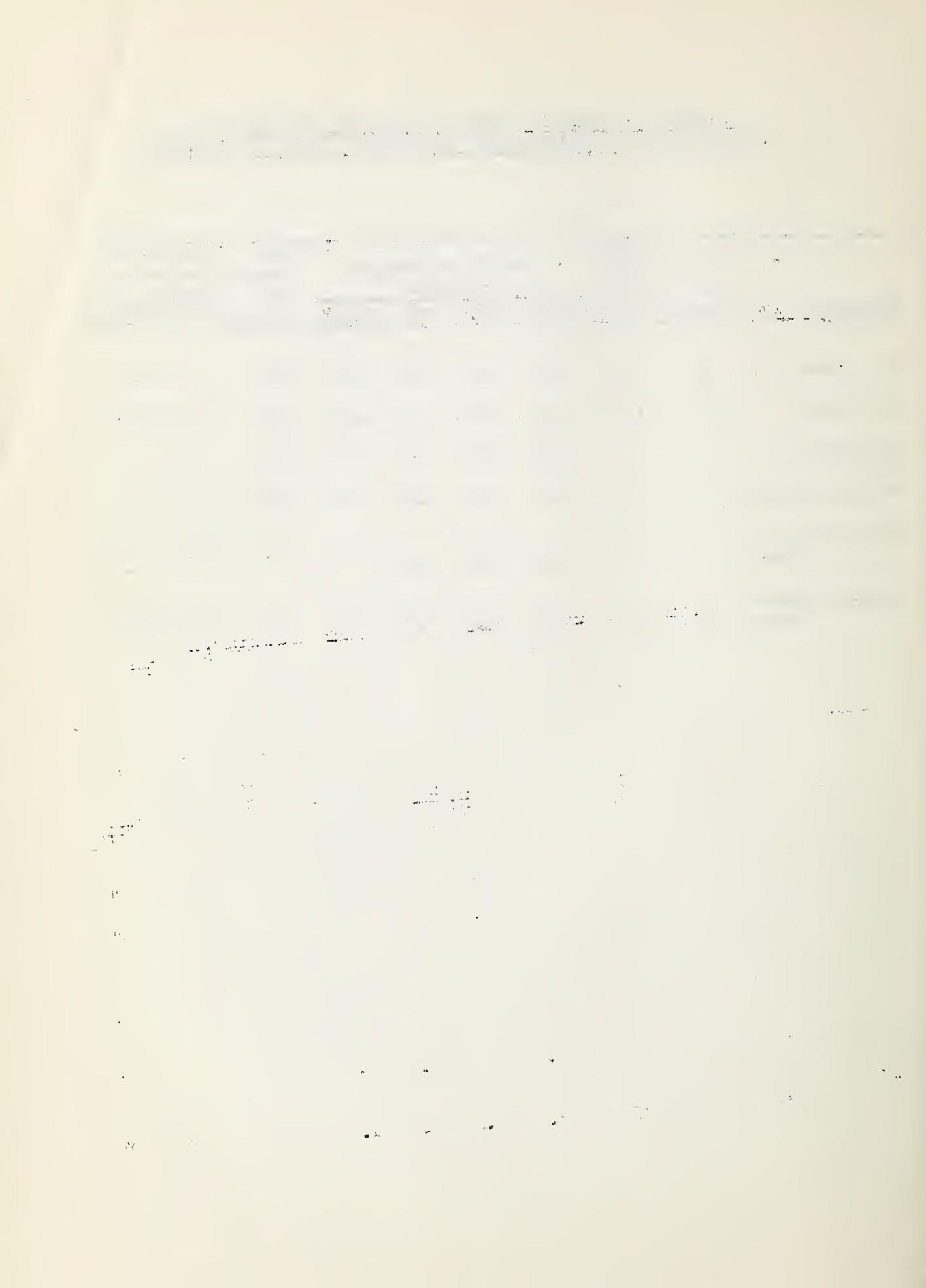
BASIN and/or STREAM	RESERVOIR	USABLE CAPACITY 1000s AF	USABLE STORAGE - 1000 ACRE FEET			15-Year Average 1938-52
			1958	1957	1956	
<u>GILA DRAINAGE</u>						
Agua Fria	Lake Pleasant	163.8	22.3	24.4	27.4	33.9 1/
Gila	San Carlos	1,205.0	176.0	0.1	53.6	205.9
Verde	Bartlett	180.0	144.6	122.7	67.6	75.9 1/
Verde	Horseshoe	143.0	106.2	57.5	2.4	31.3 1/
Salt	Roosevelt	1,381.6	263.6	159.5	229.2	516.9
Salt	Apache	245.1	238.8	162.1	230.7	194.5
Salt	Canyon	57.8	54.0	50.1	56.6	43.7
Salt	Saguaro	69.8	64.3	62.7	66.1	43.5
<u>LOWER COLORADO DRAINAGE</u>						
Colorado	Lake Havasu	688.0	598.9	638.3	616.7	578.3 1/
Colorado	Lake Mohave	1,810.0	1,737.9	1,691.0	1,717.0	1,113.9 1/
Colorado	Lake Mead	27,207.0	19,092.0	11,491.0	10,749.0	18,493.0
Little Colorado	Lyman	30.6	9.5	0.4	8.9	9.3 1/
Little Colorado	Show Low Lake	5.1	3.5	0.4	0.5	---

1/ Average is for less than 15 years of record in the 1938-52 period.



SUMMARY OF APRIL 1, 1958 ARIZONA SNOW SURVEYS AND  
COMPARISON OF DATA WITH THAT OF PREVIOUS YEARS BY WATERSHED

WATERSHED	No. of Courses in Average	Snow Depth 1958	Snow Water Content in Inches				Snow Density 1958	1958 Water Content in Percent of 1957	1958 Water Content in Percent of Normal
	Inches	1958	1957	1956	Normal	Percent	1957	Normal	
Gila River	9	5	1.9	0.0	0.2	0.5	38	---	380
Salt River	12	11	3.9	1.0	0.2	1.5	35	390	260
Verde River	8	3	0.8	0.0	0.0	1.1	27	---	73
Williams River	2	0	0.0	0.0	0.0	0.0	---	---	---
Lower Colorado River	4	12	3.2	3.2	0.7	3.3	27	100	97
Little Colorado River	9	11	3.4	0.4	0.3	1.8	31	850	189



ARIZONA SNOW SURVEYS - ABOUT APRIL 1, 1958

DRAINAGE BASIN and SNOW COURSE	No.	Elev.	SNOW COVER MEASUREMENTS						Prior Yrs. of Record	
			1958			PAST RECORD				
			Date of Survey	Snow Depth (In.)	Water Content (In.)	Water Content (In.)	1957	1956		
<u>GILA RIVER</u>										
Nutrioso	9S4	8500	3/31	4	0.9	0.0	0.0	0.6	17	
Bear Wallow 3/	10T1	8100	Report	Delayed		0.0	0.0	1.8	8	
Frisco Divide	8S1	8000	3/31	8	3.9	0.0	0.0	0.5	18	
State Line	9S8	8000	3/31	6	2.0	0.0	0.0	0.5	18	
Coronado Trail	9S7	8000	3/31	9	3.1	0.0	0.0	1.3	16	
Beaver Head	9S6	8000	3/31	12	5.5	0.0	0.0	0.9	18	
Taylor Creek	7S1	7850	3/31	0	0.0	0.0	0.0	0.1	12	
Inman	7S2	7800	3/31	0	0.0	0.0	0.0	---	8	
Rose Canyon 3/	10T2	7300	Report	Delayed		0.0	0.0	0.6	8	
Mogollon	8S2	7000	3/31	T	T	0.0	1.6	---	5	
Black Canyon	7S3	6790	3/31	3	1.3	0.0	0.0	---	5	
<u>SALT RIVER</u>										
Ft. Apache 1/	9R5	9160	3/31	32	10.3	3.9	2.3	---	8	
Baldy 1/	9S1	9125	3/31	34	11.9	0.0	0.0	---	8	
Maverick Fork	9S2	9020	3/31	40	14.0	6.7	T	---	6	
Nutrioso	9S4	8500	3/31	4	0.9	0.0	0.0	0.6	17	
Coronado Trail	9S7	8000	3/31	9	3.1	0.0	0.0	1.3	16	
Beaver Head	9S6	8000	3/31	12	5.5	0.0	0.0	0.9	18	
Pacheta	9S5	7800	4/1	0	0.0	0.0	0.0	---	5	
Gentry	10R5	7600	3/30	5	1.5	0.0	0.4	---	5	
Heber 3/	10R4	7600	3/30	6	1.6	0.0	0.6	---	4	
Canyon Creek #2 3/	10R7	7500	3/30	6	1.7	---	---	---	0	
McNary	9R2	7200	3/31	0	0.0	0.0	0.0	0.2	18	
Milk Ranch	9R1	7000	3/31	0	0.0	0.0	0.0	0.0	14	
Workman Creek	10S1	6900	3/31	0	0.0	0.0	0.0	---	5	
Forest Dale	10R6	6430	3/31	0	0.0	0.0	0.0	0.0	18	
<u>VERDE RIVER</u>										
Happy Jack 3/	11R5	7630	Report	Delayed		---	---	---	3	
Gaddes Canyon 3/	12R4	7600	3/31	10	4.4	0.0	T	---	4	
Mormon Mountain	11R3	7500	3/29	13	4.1	0.0	T	---	6	
Mormon Lake 1/	11R4	7350	3/29	7	1.9	0.0	0.0	3.1	9	
Fort Valley 1/	11P2	7350	3/31	1	0.2	0.0	0.0	1.0	11	
Mingus Mountain	12R3	7100	3/31	0	0.0	0.0	0.0	0.0	9	
Chalender	12P1	7100	3/31	1	0.2	0.0	0.0	1.5	11	
Casner Park 3/	11R2	6930	3/29	T	T	0.0	T	---	4	
Munds Park	11R1	6500	3/29	0	0.0	0.0	0.0	---	5	
Iron Springs 1/	12R2	6200	4/1	0	0.0	T	0.0	0.0	11	
Camp Wood	12R1	5700	4/1	0	0.0	0.0	0.0	0.0	11	

1/ On adjacent drainage.

2/ 1938-52 averages are estimated from existing records within period.

3/ Not included in watershed averages.



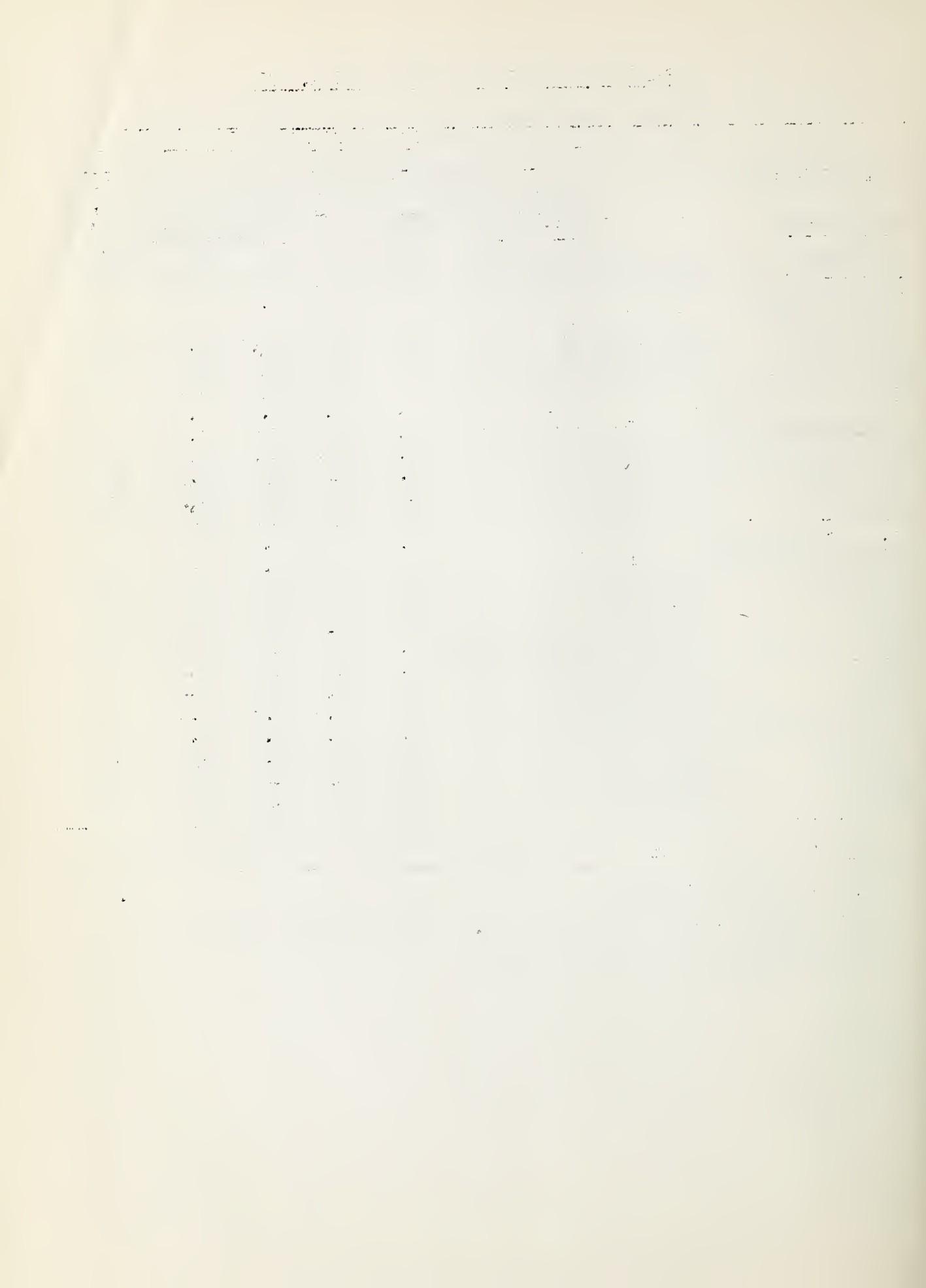
ARIZONA SNOW SURVEYS - ABOUT APRIL 1, 1958

DRAINAGE BASIN and SNOW COURSE	No.	Elev.	SNOW COVER MEASUREMENTS						Prior Yrs. of Record		
			1958			PAST RECORDS					
			Date of Survey	Snow Depth (In.)	Water Content (In.)	Water Content (In.)	1957	1956			
<u>WILLIAMS RIVER</u>											
Iron Springs	12R2	6200	4/1	0	0.0	T	0.0	0.0	11		
Camp Wood 1/	12R1	5700	4/1	0	0.0	0.0	0.0	0.0	11		
Willow Ranch 3/	13P1	5000	Report Delayed			---	0.0	0.0	6		
<u>LOWER COLORADO RIVER</u>											
Bright Angel	12N1	8400	3/31	44	12.1	12.9	2.9	9.3	10		
Grand Canyon	11P1	7500	3/31	3	0.1	0.0	0.0	1.5	10		
Fort Valley	11P2	7350	3/31	1	0.2	0.0	0.0	1.0	11		
Chalender 1/	12P1	7100	3/31	1	0.2	0.0	0.0	1.5	11		
<u>LITTLE COLORADO RIVER</u>											
Ft. Apache	9R5	9160	3/31	32	10.3	3.9	2.3	---	8		
Baldy	9S1	9125	3/31	34	11.9	0.0	0.0	---	8		
Nutrioso	9S4	8500	3/31	4	0.9	0.0	0.0	0.6	17		
Happy Jack 1/ 3/	11R5	7630	Report Delayed		---	---	---	---	3		
Gentry	10R5	7600	3/30	5	1.5	0.0	0.4	---	5		
Heber 3/	10R4	7600	3/30	6	1.6	0.0	0.6	---	4		
Canyon Creek #2 3/	10R7	7500	3/30	6	1.7	---	---	---	0		
Mormon Mountain	11R3	7500	3/29	13	4.1	0.0	T	---	6		
Mormon Lake	11R4	7350	3/29	7	1.9	0.0	0.0	3.1	9		
Fort Valley	11P2	7350	3/31	1	0.2	0.0	0.0	1.0	11		
McNary	9R2	7200	3/31	0	0.0	0.0	0.0	0.2	18		
Forest Dale	10R6	6430	3/31	0	0.0	0.0	0.0	0.0	18		

1/ On adjacent drainage.

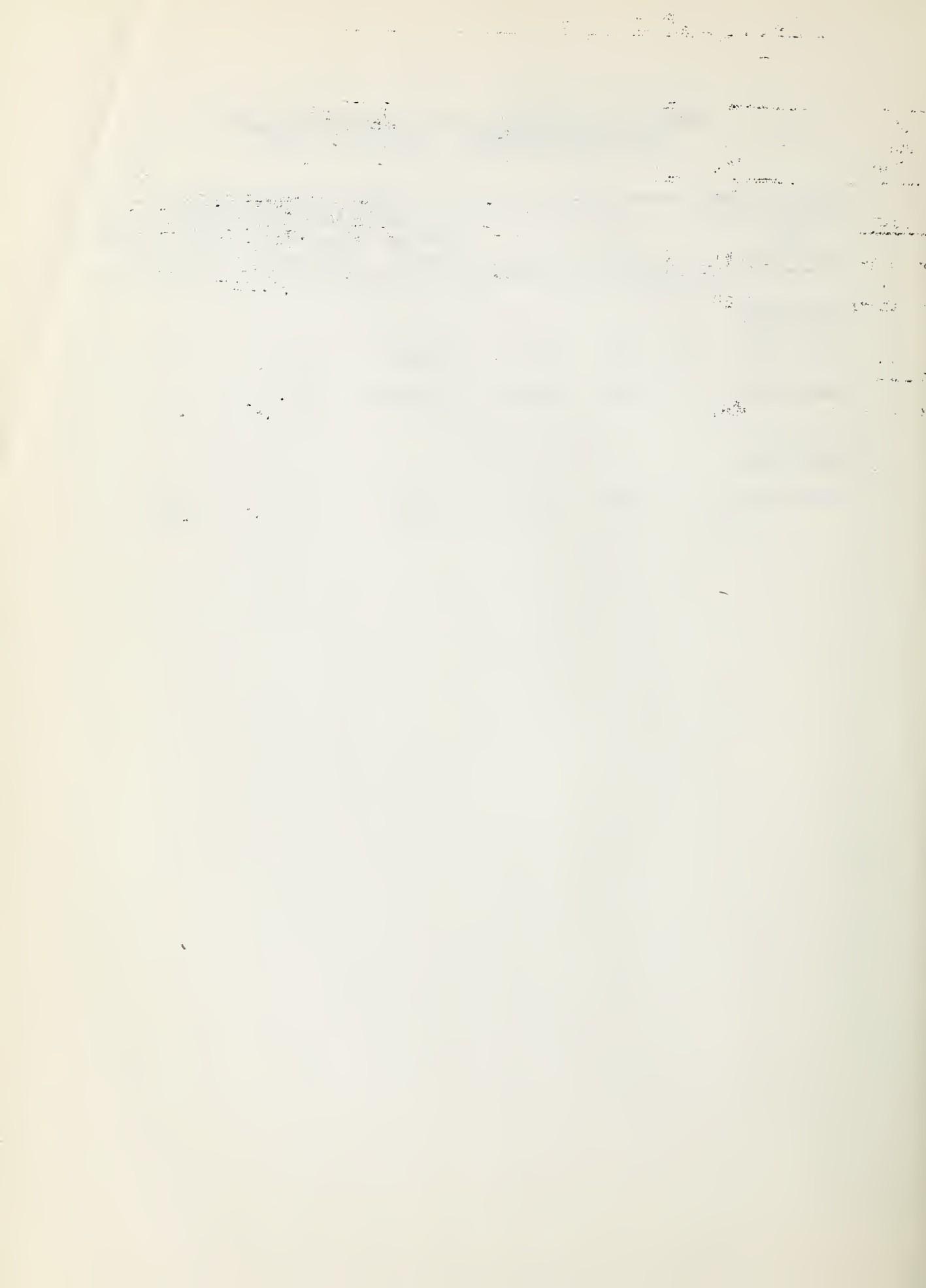
2/ 1938-52 averages are estimated from existing records within period.

3/ Not included in watershed averages.



ARIZONA SNOW SURVEYS - DELAYED REPORTS RECEIVED  
SINCE LAST BULLETIN (March 15, 1958)

DRAINAGE BASIN and SNOW COURSE	No.	Elev.	SNOW COVER MEASUREMENTS		
			Date of Survey	Snow Depth (Inches)	Water Content (Inches)
<u>GILA RIVER</u>					
Bear Wallow	10T1	8100	3/15/58	17	3.3
Rose Canyon	10T2	7300	3/15/58	11	2.6
/					
<u>SALT RIVER</u>					
Workman Creek	10S1	6900	3/14/58	17	4.7



LIST OF SNOW SURVEYORS

SNOW COURSE	SURVEYOR
Baldy .....	SCS AND SRVWUA
Bear Wallow .....	Forest Service - C. Ames & A. L. Foster
Beaver Head .....	N. A. Josh
Black Canyon .....	Wayne Black
Bright Angel .....	National Park Service - A. L. Coffin
Camp Wood .....	Mrs. C. C. Merritt
Canyon Creek .....	SCS and SRVWUA
Casner Park .....	SCS and SRVWUA
Chalender .....	Forest Service - M. C. Oleson & F. E. Page
Coronado Trail .....	Forest Service - Bill Brainard
Forest Dale .....	Fort Apache Reservation - Valverde & Endfield
Frisco Divide .....	Forest Service - Frank Carroll
Ft. Apache .....	SCS and SRVWUA
Fort Valley .....	Rocky Mt. Forest & Range Experiment Station
Gaddes Canyon .....	SCS - Richard Enz
Gentry .....	SCS and SRVWUA
Grand Canyon .....	National Park Service - J. Lynch
Happy Jack .....	Emil Ryberg
Heber .....	SCS and SRVWUA
Inman .....	C. H. McCauley
Iron Springs .....	Ernest Saxby
McNary .....	Fort Apache Reservation - Valverde & Endfield
Maverick Fork .....	SCS and SRVWUA
Milk Ranch .....	Fort Apache Reservation - Valverde & Endfield
Mingus Mountain .....	SCS - Richard Enz
Mogollon .....	J. R. Wray
Mormon Lake .....	SCS and SRVWUA
Mormon Mountain .....	SCS and SRVWUA
Munds Park .....	SCS and SRVWUA
Nutrioso .....	Forest Service - Bill Brainard
Pacheta .....	Foch Phillips
Rose Canyon .....	Forest Service - C. Ames & A. L. Foster
State Line .....	Forest Service - Frank Carroll
Taylor Creek .....	C. H. McCauley
Willow Ranch .....	Tiny Miller
Workman Creek .....	Rocky Mt. Forest & Range Experiment Station



The following organizations cooperate in the Arizona snow survey work:

FEDERAL

Department of Agriculture

Soil Conservation Service

Forest Service

Apache Forest  
Coconino Forest  
Coronado Forest  
Gila Forest  
Kaibab Forest  
Prescott Forest  
Rocky Mountain Forest and Range Experiment Station

Department of Commerce

Weather Bureau  
Arizona Section

Department of Interior

Bureau of Reclamation  
Region III

Geological Survey  
Arizona District

Bureau of Indian Affairs  
Fort Apache Reservation

National Park Service  
Grand Canyon National Park

Gila Water Commissioner  
Safford, Arizona

IRRIGATION PROJECTS

Salt River Valley Water Users' Association  
Phoenix, Arizona

San Carlos Irrigation and Drainage District  
Coolidge, Arizona

PRIVATE

Southwest Lumber Mills, Inc.  
McNary, Arizona

Other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

Federal - State - Private  
COOPERATIVE SNOW SURVEYS

Furnishes the basic data  
necessary for forecasting  
water supply for irrigation,  
domestic and municipal water  
supply, hydro-electric power  
generation, navigation,  
mining and industry

"WATER IS THE WEST'S GREATEST RESOURCE"